

December 13, 1957

Dr. Ruth Sager  
Department of Zoology  
Columbia University  
New York 27, N. Y.

Dear Ruth:

I'm not sure I remember what you wrote about - perhaps it was this. A matroclinous type of inheritance does not rule out chromosomal determination. Your zygote just might not get a certain chromosome from one parent, and double up on the other one, something like "sex ratio" in *Drosophila*, though here the mt chromosome does not control its own behavior, but that of another one. *Sciara* would be another precedent for selective elimination of chromosomes.

I don't know how you can rule out this class of hypotheses- an anomalous mechanics for a chromosome can probably be devised to match any plasmid.

Yours sincerely,

Joshua Lederberg  
Professor of Medical Genetics

JL/ew